

What is claimed is:

- 1                   1. A method of processing packets at a firewall in a packet-switched  
2 network comprising:  
3                   receiving an outbound packet from a process group network address; and  
4                   authorizing subsequent inbound packet traffic destined for the process  
5 group network address.
- 1                   2. The invention of claim 1 further comprising the subsequent step of  
2 canceling authorization for subsequent inbound packet traffic destined for the process  
3 group network address after a period of time.
- 1                   3. The invention of claim 2 wherein the outbound packet begins a  
2 connection protocol and authorization is canceled after the connection terminates.
- 1                   4. The invention of claim 1 wherein the addresses are expressed as IPv4  
2 address.
- 1                   5. The invention of claim 1 wherein the addresses are expressed as IPv6  
2 addresses, wherein a portion of the address is reserved to identify a host process group.
- 1                   6. A method of processing packets at a host which are destined for a  
2 firewall in a packet-switched network comprising the steps of:  
3                   assigning a process group network address to a first outbound packet  
4 commencing a process;  
5                   transmitting the outbound packet to a firewall on its path to its destination  
6 in a packet-switched network;

7 receiving inbound packets addressed to the process group network  
 8 address; and  
 9 receiving and associating inbound packets addressed to the process group  
 10 network address with the process.

1 7. The invention of claim 6 wherein the process is a connection across  
 2 the packet-switched network to another host.

1 8. The invention of claim 6 further comprising the step of notifying the  
 2 firewall when the process terminates.

1 9. The invention of claim 6 wherein the host uses a dynamic host  
 2 configuration protocol to dynamically assign the process group network address.

1 10. A computer readable medium containing executable program  
 2 instructions for performing a method on a firewall connected to a packet-switched  
 3 network comprising the steps of:  
 4 receiving an outbound packet from a process group network address; and  
 5 authorizing subsequent inbound packet traffic destined for the process  
 6 group network address.

1 11. The invention of claim 10 further comprising the subsequent step of  
 2 canceling authorization for subsequent inbound packet traffic destined for the process  
 3 group network address after a period of time.

1 12. The invention of claim 11 wherein the outbound packet begins a  
 2 connection protocol and authorization is canceled after the connection terminates.

1                   13. The invention of claim 10 wherein the addresses are expressed as IPv4  
2 address.

1                   14. The invention of claim 10 wherein the addresses are expressed as IPv6  
2 addresses, wherein a portion of the address is reserved to identify a host process group.

1                   15. A computer readable medium containing executable program  
2 instructions for performing a method on a host connected to a packet-switched network  
3 comprising the steps of:

4                   assigning a process group network address to a first outbound packet  
5 commencing a process;

6                   transmitting the outbound packet to a firewall on its path to its destination  
7 in a packet-switched network;

8                   receiving inbound packets addressed to the process group network  
9 address; and

10                  receiving and associating inbound packets addressed to the process group  
11 network address with the process.

1                   16. The invention of claim 15 wherein the process is a connection across  
2 the packet-switched network to another host.

1                   17. The invention of claim 15 further comprising the step of notifying the  
2 firewall when the process terminates.

1                   18. The invention of claim 15 wherein the host uses a dynamic host  
2 configuration protocol to dynamically assign the process group network address.